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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,828	10/30/2003	Junji Okada	117632	7196
25944	7590	06/14/2005		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LEPISTO, RYAN A	
			ART UNIT	PAPER NUMBER
			2883	
DATE MAILED: 06/14/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/695,828

Applicant(s)

OKADA ET AL

Examiner

Ryan Lepisto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/03, 6/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1-22** are rejected under 35 U.S.C. 102(b) as being anticipated by **Hirota et al (JP 10-123350 A)** (Hirota) and the US translation of the Hirota reference. Hirota teaches a signal processing device (Fig. 6, paragraphs 0029-0035) comprising light signal transmitting devices (laser diodes, 42a, which transmit signals according to an electric signal) for inputting a signal from one end of an optical path on circuit board (40) on a incident side of a light guide body (21) and outputting the signal towards a plurality of output nodes (42, photodiodes, 42b, which convert light signals to electric signals for an electric circuit (part of 40) to process the signal) wherein a polymethyl methacrylate (PMMA) (paragraph 0030), rectangular, light transmitting connecting material (part of 21), which has a refractive index of 1.485 according to the applicant's disclosure (page 10) and that surrounds the entire transmission layer (21) and a part (and any gaps present) of the optical paths of the circuit boards (40) (Fig. 6), that optical connects the optical paths includes particles (21a) for scattering the signal light in an optical medium (part of 21) and secures the laser diodes and photodiodes and therefore has adhering means. Further it is implied that the average particle diameter of the particles (21a) is

greater than the wavelength of the signal light since the particles scatter the signal (smaller diameter particles would not scatter the signal as taught), that the preferred embodiments all have polymer components and the cladding (22) of the transmission layer (21) can be chosen to be a aluminum oxide, which would reflect signals (paragraph 0033).

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kyojuka et al (JP 2000-241655) and its corresponding US translation anticipate claims 1, 3-5, 7-12, 14-16 and 18-22.
- The following references are pertinent to the state of the prior art at the time of applicant's invention: "Mode Mixing and Polarization Scrambling Microparticles in Polymeric Resin Filled Optical Couplers", Grimes, G., IEEE Transactions on Components, Hybrids, and Manufacturing Technology, Volume 16, No. 3, May 1993, Ulrich (US 4,087,159), Yokogawa et al (US 5,099,357), Blyler, Jr. et al (US 5,166,933), Doiron et al (US 5,196,005), Matsuura et al (US 5,586,209), Saitoh (US 5,742,717), Li et al (US 5,745,619), Yoshimura et al (US 6,081,632), Bernard et al (US 6,360,039 B1), Parker et al (US 2003/0002733 A1), Steenbergen et al (US 2003/0012510 A1), Garito et al (US 2003/0224214 A1), Parker et al (US 2003/0228096 A1), Parker et al (US 2004/0067035 A1), Baney

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et al (US 2004/0071405 A1), Parker et al (US 6,735,368 B2), Parker et al (US 6,788,863 B2), Okada et al (US 6,792,213 B1), Yamada et al (US 6,878,925 B2).

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Lepisto

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Date: 5/31/05



Frank Font

Supervisory Patent Examiner

Technology Center 2800